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G2J JMK
B6A ADN
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(56) Documents Cited

| | | |
|--------------|--------------|--------------|
| GB 2079971 A | GB 1499755 A | GB 1422159 A |
| GB 1357340 A | GB 1066071 A | GB 0756475 A |
| GB 0195630 A | US 3019689 A | |

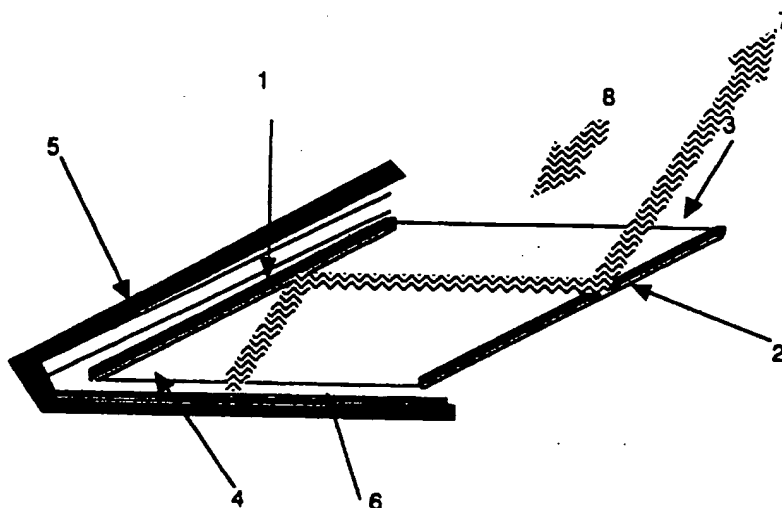
(58) Field of Search

UK CL (Edition O) G2J JB7G JMK , H4F FFN FFP FFX
FJL
INT CL⁶ G02B , H04N

(54) Optical device with two reflective surfaces for inserting in partially open book

(57) A wedge shaped device with one acute angle may be inserted into a partially open book 5, allowing the book to be kept partially open, illuminated from 8 and examined at 7 either directly or by double reflection. The device has two reflective surfaces 1, 2 which may be held in position by transparent elements 3, 4. The book may be supported in a partially open position by a container (10, Fig 5) for the device (11, Fig.5).

Figure 3



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Figure 1

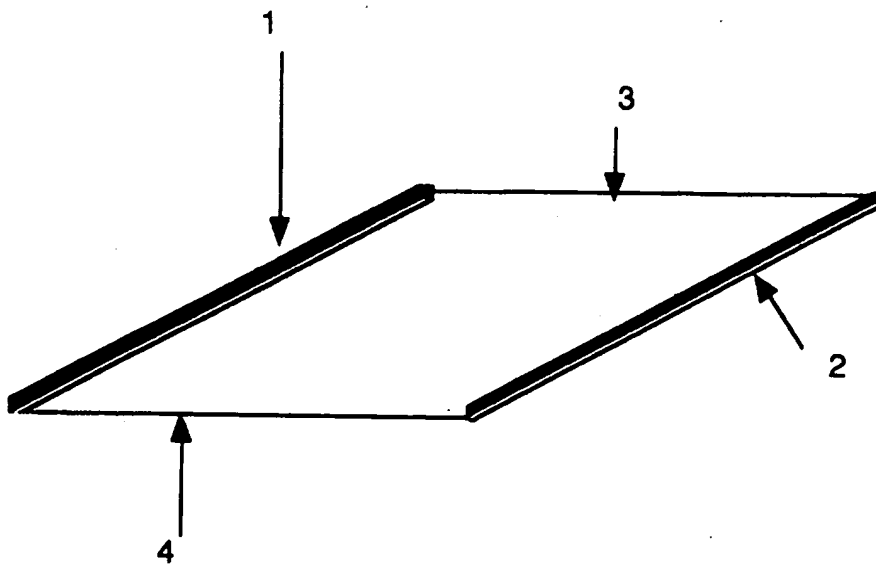


Figure 2

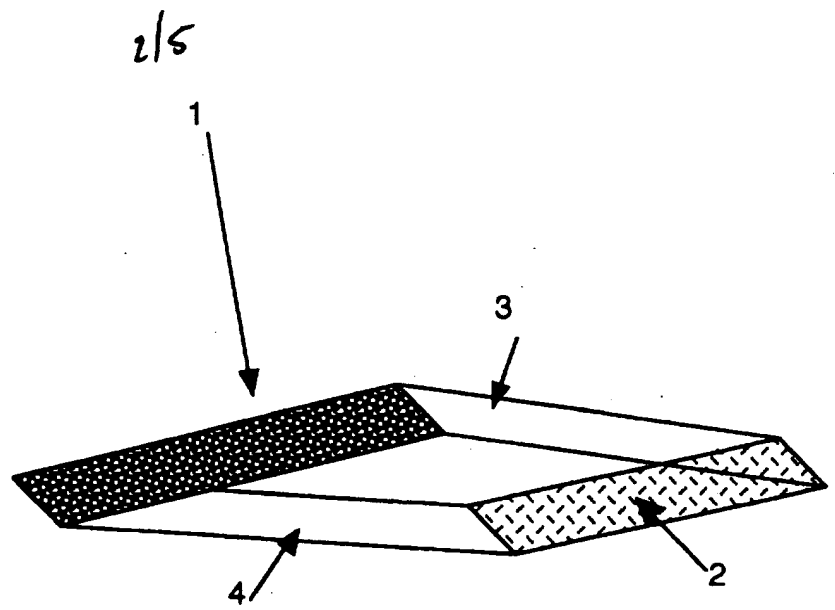


Figure 3

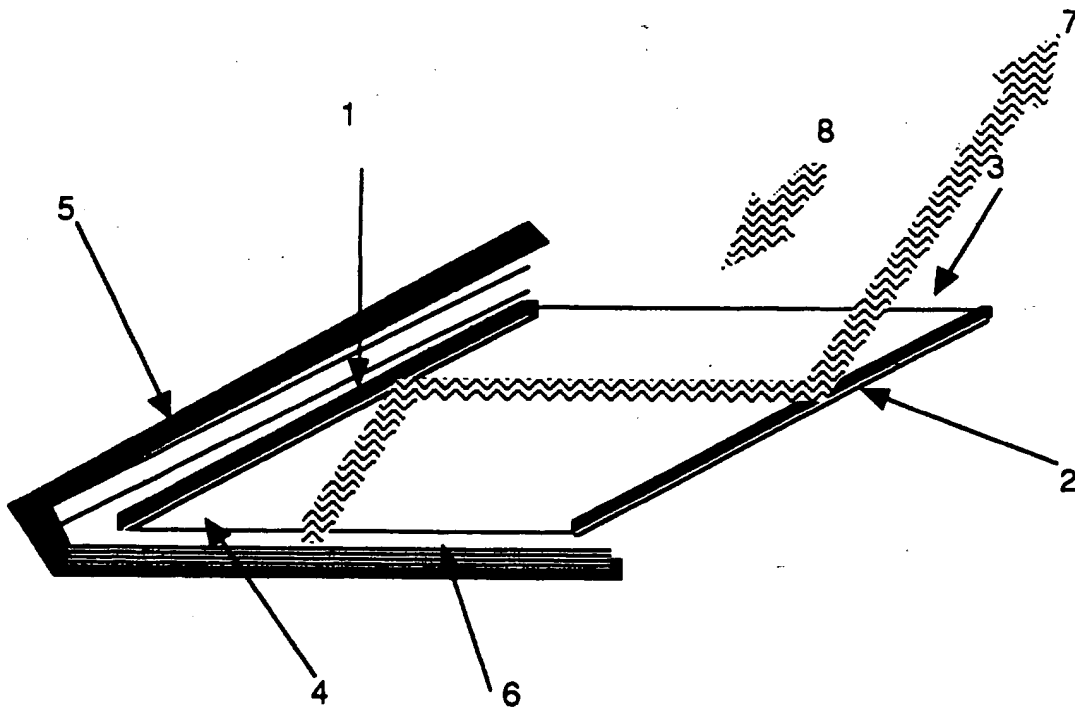
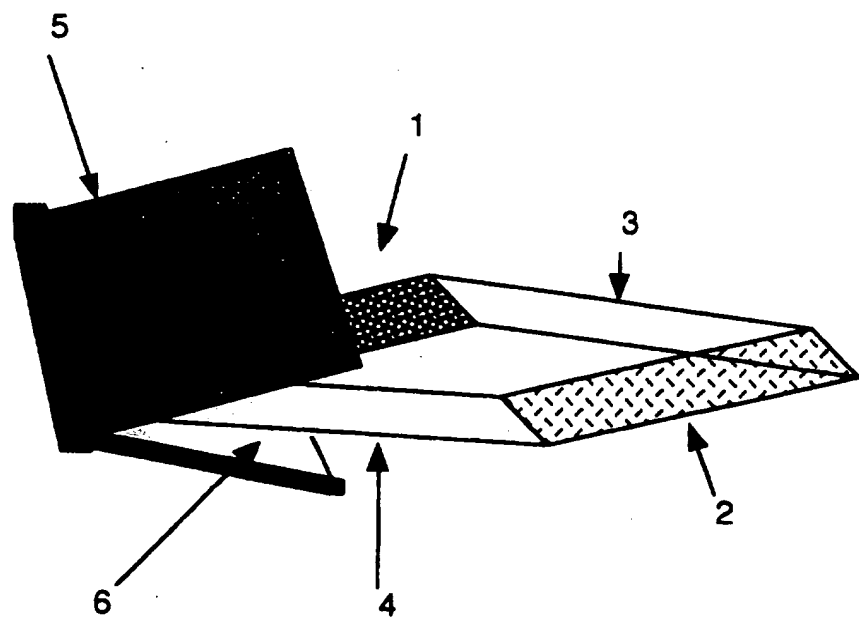


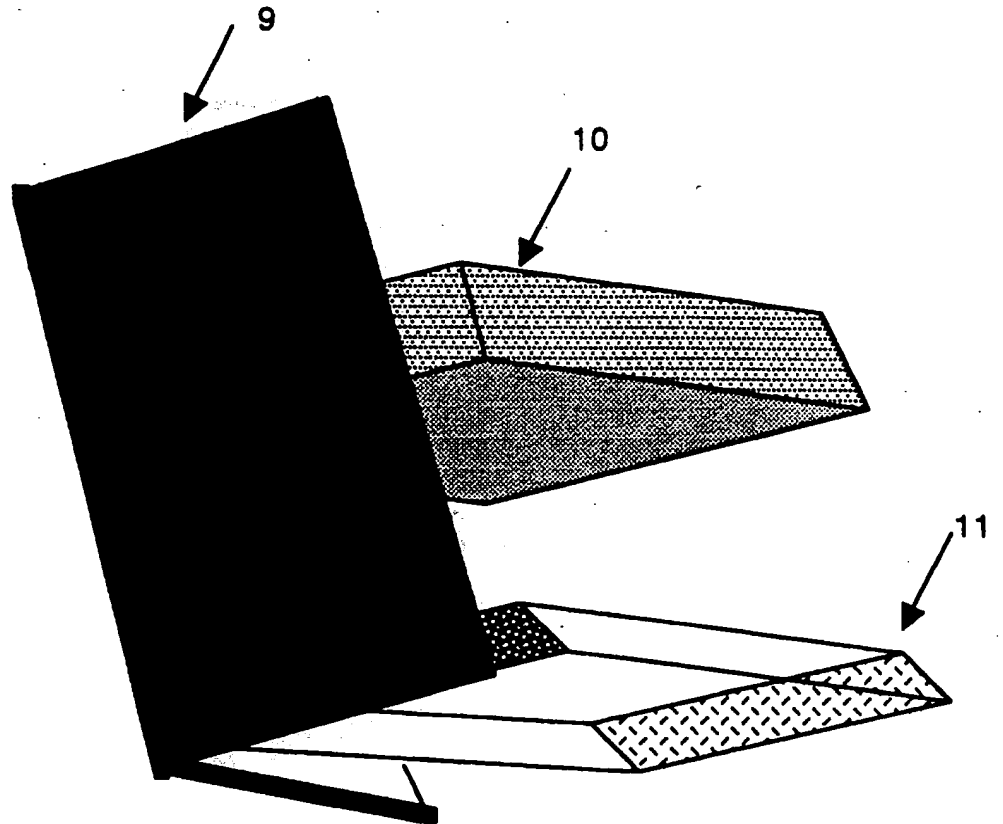
Figure 4

4/5



5/5

Figure 5



MINIMUM OPENING BOOK EXAMINER two

This invention relates to a means of allowing books to be examined without damage.

It is necessary to have due regard to the safe handling of books, which have fine bindings, or which have sewings which result in difficulty in opening the book. Excessive pressure in attempting to force books to open to maximise the page area to be examined is not acceptable. Some books may not be opened more than thirty degrees without risk of damage. Even when opened partially such books may be difficult to read due to factors such as fragility, lack of light and the sight angle. Furthermore two hands may be needed to hold and to open the book. The consequences of such factors are that damage may occur to the book and varying degrees of difficulty may be experienced in examining and in recording the contents of the book.

According to the present invention there is provided a wedge shaped device which may be inserted into a partially open book. The device includes a reflective system, so that the page may be examined. The device may be housed in a container, which may also be used in certain circumstances.

Light reflected by an odd number of reflective surfaces is reversed, and therefore the image cannot be comprehended naturally. Light reflected from an even number of reflective surfaces gives an image which may be comprehended naturally. The MOBE two device has two reflective surfaces, and the resulting image can therefore be comprehended naturally.

A specific embodiment of the present invention will now be described by way of

example with reference to the accompanying drawings in which:-

Figure 1 shows the device from the side.

Figure 2 shows the device in perspective.

Figure 3 shows the device (from the side) inserted into a book.

Figure 4 shows the device (in perspective) inserted into a book.

Figure 5 shows the device and the container of the device (in perspective) inserted into a tall book.

Referring to the drawing the device comprises the first mirror 1 with the reflective surface facing downwards, and a second mirror 2 with the reflective surface facing upwards. The mirrors are held in position by the transparent elements 3 and 4, where the acute angle, typically, is 30 degrees. A book 5, open to the same acute angle, is placed in position as shown.

The light from the page-to-be-viewed 6 strikes the first mirror 1 and then the second mirror 2, before emerging from the device in the direction of 7.

The page may be illuminated by light travelling in the direction of the arrow 8, or from the top or the bottom of the book.

Books which are unusually tall 9 may be supported in the partially open position by the container 10 and the device 11 so that viewing may take place.

CLAIMS

1. A wedge shaped device with two reflective surfaces, so positioned that light from an object to be examined is reflected first from one and then from the other reflective surface so that the light emerges from the opening for viewing.
2. A means of keeping a book partially open.
3. A means of keeping a book partially open, without damage to the book.
4. A means of keeping a book open 30 degrees, without damage to the book.
5. A means of keeping a book partially open so that it may be examined, either directly or by reflection, without damage to the book.
6. A means of keeping a book open 30 degrees so that it may be examined, either directly or by reflection without damage to the book.
7. A device substantially as described herein.

Amendments to the claims have been filed as follows

1. A device, preferably wedge-shaped, with two reflective surfaces, so positioned that light from an object to be examined, for example a book, is reflected first from one and then from the other reflective surface so that the light emerges for viewing.
2. A means of keeping a book partially open, without damage, so that it may be examined.
3. A means of keeping a tall book partially open, without damage, so that it may be examined.
4. A means of keeping a book open 30 degrees, without damage, so that it may be examined.
5. A means of keeping a tall book open 30 degrees, without damage, so that it may be examined.
6. A device substantially as described herein.



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Claims searched: 1,6

Examiner: Chris Ross
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Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.O): G2J(JB7G,JMK),H4F(FJL,FFN,FFP,FFX)

Int CI (Ed.6): G02B,H04N

Other:

Documents considered to be relevant:

| Category | Identity of document and relevant passage | Relevant to claims |
|----------|---|--------------------|
| X | GB 2079971 A (RANK) Fig 5 | 1 at least |
| " | GB 1499755 A (MULLARD) Fig 3 R1,R3,p 2 l 112 on | " |
| " | GB 1422159 A (SFS) Fig 2 | " |
| " | GB 1357340 A (EMI) Figs 2-4 | " |
| " | GB 1066071 A (CZ-S) Fig 2 | " |
| " | GB 0756475 A (MORROS) Fig 1,p 2 l 49 on | " |
| " | GB 0195630 A (CF) prism P1,p 2 ll 68-9,99-101 | " |
| " | US 3019689 A (PAULSRUD) Figs 1,4 | " |

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.

A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier